## **Toward Vector Spaces**

## Brown clusters are nice, but limiting:

- Arbitrary cut-off point → two words may be assigned different classes arbitrarily because of our chosen cutoff
- Definition of "similarity" is limited to only bigrams of classes<sup>3</sup>
- Completely misses lots of regularity that's present in language

 $<sup>^3</sup>$ There  $\it are$  adaptations of Brown clustering that move past this, but what we'll see today is still even better.